c.) Amendments to the Claims.

Please amend claims 1, 2, 12, 13, 21, 24, 28, 33, 36, 41, 43, 47, 48, 51, 58, 60, 62, 69, 70 and 74 and add claims 76-81 as follows, all without prejudice or disclaimer to the subject matter thereof.

1. (currently amended) A probe device, comprising:

a collection fiber, said collection fiber comprising:

a proximal end;

a distal collection end opposite said proximal end adapted to collect ~~infrared~~ radiation; and

an ~~infrared~~ conductive core located between said proximal end and said distal collection end;

a sheath surrounding a portion of said collection fiber; and

a first anchoring balloon disposed on said sheath, said balloon having a wall, wherein said distal collection end directly contacts a portion of the wall of the balloon, said portion of the wall being adjacent to a surface of interest.

2. (currently amended) The probe device of claim 1, further comprising a multispectral or hyperspectral spectrometer optically coupled to said proximal end of said collection fiber and a detector array functionally coupled to said spectrometer to detect ~~infrared~~ radiation from said proximal end of said collection fiber.

3. (original) The probe device of claim 2, wherein the detector array is sensitive to wavelengths of between 6,000 nm and 12,000 nm.

4. (original) The probe device of claim 1, further comprising an illumination fiber, said illumination fiber having a distal illumination end adjacent to said distal collection end of said collection fiber and a proximate end optically coupled to an illumination source.

5. (original) The probe device of claim 4, wherein said sheath surrounds a portion of said illumination fiber.

6. (canceled).

7. (original) The probe device of claim 2, further comprising an optical coupler for optically coupling said proximal end of said collection fiber to said spectrometer.

8. (original) The probe device of claim 7, wherein said optical coupler comprises a lens.

9. (original) The probe device of claim 1, wherein said collection fiber is flexible.

10. (original) The probe device of claim 1, further comprising means proximate to said distal collection end to orient said distal collection end in a radial direction with respect to a longitudinal axis of said fiber core.

11. (original) The probe device of claim 10, wherein said means proximate to said distal collection end to orient said distal collection end in the radial direction comprises a bend in said fiber core, and wherein said bend deploys radially when said distal collection end is advanced through a hole in said sheath.

12. (currently amended) The probe device of claim 1, further comprising means for orienting the collection of infrared ~~light~~, near infrared, visible, ultraviolet radiation or combinations thereof by the collection fiber, said means selected from the group consisting of a bend, a mirror, a crystal or a prism.

13. (currently amended) The probe device of claim 1, further comprising a detector element functionally coupled to said collection fiber to detect infrared, near infrared, visible, ultraviolet radiation or combinations thereof from said proximal end of said collection fiber, wherein said detector element is disposed at or near the collection end of the collection fiber.

14. (original) The probe device of claim 1, wherein the total diameter of said collection fiber, sheath and balloon have a diameter of greater than 1 cm when said first balloon is maximally inflated.

15. (original) The probe device of claim 1, wherein the total diameter of said collection fiber,

sheath and balloon have a diameter of less than 4 mm when said first balloon is maximally inflated.

16. (original) The probe device of claim 1, wherein said distal collection end of said collection fiber is positioned inside the wall of said first anchoring balloon.

17. (original) The probe device of claim 1, wherein said distal collection end of said collection fiber is positioned adjacent to the outside of said wall of said balloon.

18. (original) The probe device of claim 1, further comprising a second anchoring balloon, and wherein said sheath has a distal portion extending past said distal collection end of said collection fiber, and wherein said first anchoring balloon is disposed on said sheath between said proximal end and said distal collection end of said collection fiber and said second anchoring balloon is disposed on said distal portion of said sheath.

19. (original) The probe device of claim 18, further comprising an opening in said sheath between said first and said second anchoring balloons.

20. (original) The probe device of claim 1, wherein said first anchoring balloon comprises a proximate end and a distal end, and a passage through said first anchoring balloon to allow fluid communication between said proximate end and said distal end of said first anchoring balloon.

21. (currently amended) The probe device of claim 1, further comprising a plurality of collecting fibers disposed at least partly in said sheath for collecting infrared, near infrared, visible, ultraviolet radiation or a combination thereof.

22. (original) The probe of claim 1, further comprising an interactive coating on said first anchoring balloon.

23. (original) The probe of claim 22, wherein said coating is selected from the group consisting of proteins, antigens, stimulants, effector molecules and chemicals.

24. (currently amended) A probe device comprising:

an imaging collection fiber bundle comprising a plurality of collection fibers adapted to collect ~~infrared~~ radiation, each of said plurality of collection fibers comprising a proximal end, a distal collection end opposite said proximal end, and a conductive core located between said proximal end and said distal collection end; and

a first anchoring balloon disposed on said fiber bundle, said balloon having a wall, wherein said distal collection end directly contacts a portion of the wall of the balloon, said portion of the wall being adjacent to a surface of interest.

25. (original) The probe device of claim 24, wherein said distal collection ends of said plurality of collection fibers are disposed inside said wall of said first anchoring balloon.

26. (original) The probe device of claim 24, further comprising a spectrometer and a detector array optically coupled to said proximal end of said plurality of collection fibers to acquire an image.

27. (original) The probe device of claim 26, wherein said detector array is sensitive to wavelengths of between 6,000 nm and 12,000 nm.

28. (currently amended) The probe device of claim ~~24~~ 1, wherein said first balloon, sheath, collection fiber or combinations thereof are disposable.

29. (original) The probe device of claim 24, further comprising an illumination fiber having a distal illumination end adjacent to said distal collection ends of said plurality of collection fibers and a proximate end coupled to an illumination source.

30. (original) The probe device of claim 24, wherein said first anchoring balloon has a toroidal shape.

31. (original) The probe device of claim 24, further comprising a conduit passing through said wall of said first anchoring balloon and having a portion extending distally past said

distal collection ends of said plurality of collection fibers, and a second anchoring balloon, said second anchoring balloon being attached to said portion of said conduit that extends distally past said distal collection end of said plurality of collection fibers.

32. (original) The probe device of claim 31, wherein said conduit has an opening between said first and second balloons allowing fluid communication with a space between said first and second balloons.

33. (currently amended) The probe device of claim 24, wherein the ~~light~~ radiation collected by each of said collection fibers provides a single pixel for incorporation into a display.

34. (original) The probe device of claim 25, wherein said distal collection ends of said plurality of collection fibers are positioned adjacent to the inside of said wall of said first balloon.

35. (original) The probe device of claim 24, wherein said plurality of collection fibers in said fiber bundle are positioned adjacent to the outside of said wall of said balloon to form a bundle that surrounds said first balloon.

36. (currently amended) The probe device of claim 24, wherein the ~~light~~ radiation collected by the plurality of collection fibers is translated into an image optimized to facilitate interpretation.

37. (original) The probe device of claim 24, wherein said fiber bundle is flexible.

38. (original) The probe device of claim 24, further including means proximate said distal collection end of each fiber to orient said distal collection ends in a radial direction with respect to a longitudinal axis of the cores of said fibers.

39. (original) The probe device of claim 38, wherein said means proximate said distal collection end to orient said distal collection ends in a radial direction comprises bends in said fiber cores.

40. (original) The probe device of claim 39, wherein said bends in said fiber cores orient said plurality of collection fibers in at least two different directions.

41. (currently amended) The probe device of claim 38, further comprising means for orienting the collection of infrared ~~light~~, near infrared, visible, ultraviolet radiation or a combination thereof by the plurality of collection fibers, said means selected from the group consisting of a bend, a mirror, or a crystal.

42. (original) The probe device of claim 26, wherein said detector array comprises a focal plane.

43. (currently amended) An endoscopic probe comprising:

a collection fiber, said collection fiber comprising a proximal end, a distal collection end opposite said proximal end, and a conductive core located between said proximal end and said distal collection end;

an illumination fiber having a distal illumination end adjacent to said distal collection end of said collection fiber and a proximate end coupled to an illumination source; and

an anchoring balloon positioned on said probe such that said distal collection end and distal illumination end are disposed ~~inside~~ on an outer surface of said balloon.

44. (original) The probe of claim 43, wherein the probe further comprises a sheath surrounding a portion of said collection fiber and a portion of said illumination fiber.

45. (original) The probe of claim 43, wherein the balloon is infrared lucent.

46. (canceled).

47. (currently amended) A method for obtaining information about a surface of interest, comprising the steps of:

positioning a probe adjacent to said surface of interest, said probe comprising a collection fiber, said collection fiber comprising a proximal end, a distal collection end

opposite said proximal end adapted to collect ~~infrared light~~ radiation, and an ~~infrared~~ conductive core located between said proximal end and said distal collection end, and a first anchoring balloon disposed on said probe, wherein said distal collection end directly contacts a portion of a wall of the balloon, said portion of the wall being adjacent to said surface of interest;

collecting ~~infrared light~~ radiation from said surface using said probe;

transmitting the ~~infrared light~~ radiation collected from said surface to analyzing means; and analyzing the ~~infrared light~~ radiation to determine one or more properties of said surface.

48. (currently amended) The method of claim 47, wherein said probe has a longitudinal axis and the step of collecting ~~light~~ radiation comprises collecting ~~infrared light~~ radiation in the vicinity of said collection end of said probe that radiates in a direction generally perpendicular to the longitudinal axis of said probe.

49. (original) The method of claim 48, wherein said collection fiber is moveably disposed in a sheath having a hole, and said collection fiber further comprises a bend in the core which deploys radially as the collection fiber is advanced through said hole in said sheath.

50. (original) The method of claim 47, further comprising the step of distending the surface of interest by inflating said first balloon to optimize analysis of the surface.

51. (currently amended) The method of claim 47, wherein the step of analyzing comprises hyperspectral or multispectral spectroscopic analysis.

52. (canceled).

53. (original) The method of claim 47, wherein the probe further comprises a sheath surrounding a portion of said collection fiber wherein said first anchoring balloon is disposed on said sheath between said proximal end and said distal collection end, and said sheath extends distally past said distal collection end and wherein said probe further comprises a second anchoring balloon disposed on said sheath distal to said distal collection end, and

wherein said surface of interest is disposed in a lumen, and the method further comprises the steps of inflating said first anchoring balloon and said second anchoring balloon to create an enclosed volume defined by said first anchoring balloon, said second anchoring balloon and said lumen, and filling said volume with a fluid.

54. (original) The method of claim 53, wherein said anchoring balloons are inflated sequentially.

55. (original) The method of claim 53, wherein said fluid comprises an infrared lucent gas.

56. (original) The method of claim 53, wherein said fluid comprises an infrared lucent liquid.

57. (original) The method of claim 53, further comprising the step of inserting said distal collection end of said collection fiber into the enclosed volume after inflating said first and second anchoring balloons and filling the volume with said fluid.

58. (currently amended) A method for obtaining information about a surface of interest, comprising the steps of:

positioning a probe adjacent to said surface of interest, said probe comprising a ~~light~~ collection fiber bundle comprising a plurality of collection fibers adapted to collect ~~light~~ radiation, each of said plurality of collection fibers comprising a proximal end, a distal collection end opposite said proximal end, and a conductive core located between said proximal end and said distal collection end, wherein said distal collection end directly contacts a portion of the wall of the balloon, said portion of the wall being adjacent to a surface of interest;

collecting ~~infrared light~~ radiation from said surface using said probe;

transmitting the ~~infrared light~~ radiation collected from said surface to analyzing means; and

analyzing the ~~infrared light~~ radiation to determine one or more properties of said surface.

59. (original) The method of claim 58, wherein the probe further comprises an anchoring balloon having a wall disposed on said probe such that the distal collection ends of said plurality of collection fibers are disposed inside said wall of said anchoring balloon.

60. (currently amended) The method of claim 58, wherein said probe has a longitudinal axis and the step of collecting ~~light~~ radiation comprises collecting ~~light~~ radiation in the vicinity of said distal collection ends of said probe that radiates in a direction generally perpendicular to the longitudinal axis of said probe.

61. (original) The method of claim 60, wherein the plurality of collection fibers are moveably disposed in a sheath and wherein said collection fibers each have a bend therein that deploys in a radial direction as the distal ends of the collection fibers are advanced outside of the sheath.

62. (currently amended) The method of claim 58, wherein the step of analyzing comprises hyperspectral or multispectral spectroscopic analysis.

63. (original) The method of claim 58, wherein said probe further comprises a sheath disposed around said fiber bundle, a first anchoring balloon disposed on said sheath between said distal collection ends and said proximal ends of said plurality of fibers, and a second anchoring balloon disposed on a said sheath distal to said distal collection ends of said plurality of fibers and wherein said surface of interest is disposed in a lumen, and the method further comprises the steps of inflating said first anchoring balloon and said second anchoring balloon to create an enclosed volume defined by said first anchoring balloon, said second anchoring balloon and said lumen, and filling said volume with a fluid.

64. (original) The method of claim 63, wherein said fluid comprises an infrared lucent gas or liquid.

65. (original) The method of claim 63, further comprising the step of inserting said distal collection ends of said plurality of collection fibers into the enclosed volume after inflating said first and second anchoring balloons and filling the volume with said fluid.

66. (original) A method for obtaining information about a tissue surface, comprising the steps of: collecting infrared radiation from said tissue surface using a probe placed proximate to said tissue surface; transmitting the infrared radiation collected from said surface to a remote analyzer; and analyzing the infrared radiation to determine properties of said tissue surface.

67. (original) The method of claim 66, wherein the step of analyzing comprises spectroscopic analysis.

68. (original) The method of claim 66, wherein the step of collecting and transmitting is performed using multiple fibers in said probe.

69. (currently amended) The method of claim 66, wherein said probe has a longitudinal axis and the step of: collecting infrared radiation comprises collecting infrared ~~light~~ radiation in the vicinity of a collection end of said probe that radiates in a direction generally perpendicular to the longitudinal axis of said probe.

70. (currently amended) The method of claim 66, wherein said probe comprises means for optically coupling said probe to said tissue surface to permit transmission and collection of infrared ~~light~~ radiation.

71. (original) The method of claim 70, wherein said means for optically coupling comprises an anchoring balloon disposed around a collection end of said probe.

72. (original) The method of claim 70, wherein said means for optically coupling comprises a first anchoring balloon and a second anchoring balloon disposed on said probe such that a collection end of said probe is positioned between said first and said second anchoring balloons.

73. (original) The method of claim 66, wherein said tissue surface is disposed on a tissue, said tissue having an opposing surface disposed opposite said tissue surface, and wherein the method further comprises the step of providing a source of infrared radiation adjacent said

opposing surface, and the step of collecting comprises collecting the radiation transmitted through the tissue to the probe.

74. (currently amended) An endoscopic probe comprising:

a toroidally-shaped anchoring balloon having a central hole there through; and

a collection fiber adapted to collect ~~infrared~~ radiation, said fiber having a distal collection end, said distal collection end being disposed inside said central hole of said balloon, and wherein said distal collection end is in apposition with a surface of interest.

75. (original) The probe of claim 74, further comprising an illumination fiber having a distal illumination end, said distal illumination end being disposed inside said central hole of said balloon.

76. (new) The probe device of claim 1, wherein the radiation is infrared, visible, ultraviolet, near infrared, or combinations thereof.

77. (new) The probe device of claim 76, wherein the conductive core is an infrared conductive core.

78. (new) The probe device of claim 24, wherein said plurality of collection fibers is adapted to collect infrared radiation, near infrared radiation, visible radiation, ultraviolet radiation, or combinations thereof.

79. (new) The method of claim 47, wherein said distal collection end is adapted to collect infrared radiation, near infrared radiation, visible radiation, ultraviolet radiation, or combinations thereof.

80. (new) The method of claim 58, wherein said plurality of collection fibers is adapted to collect infrared radiation, near infrared radiation, visible radiation, ultraviolet radiation, or combinations thereof.

81. (new) The endoscopic probe of claim 74, wherein the collection fiber is adapted to collect infrared radiation, near infrared radiation, visible radiation, ultraviolet radiation, or combinations thereof.